| М. | abscessus      | acatgcaagtcg  | 51 |
|----|----------------|---|----|
| М. | avium          | gacgaacgctggcgtgcttaacacatgcaagtcg                  |    |
| М. | bovis          | gcggcgtgcttaacacatgcaagtcg                          |    |
| М. | chelonae       | gacgaacgctggcggcgtgcttaacacatgcaagtcg               |    |
| М. | farcinogen     | cgaacgctcgcggcgtgcttaacacatgcaagtcg                 |    |
| М. | fortuitum      | ggcggcgtgcttaacacatgcaagtcg                         |    |
| М. | gordonae       | ggcggcgtgcttaacacatgcaagtcg                         |    |
| М. | heckeshornense | tgatcctggctcaggacgaacgctggcggcgtgcttaacacatgcaagtcg |    |
| М. | intercellulare | <u>ttaacacatgcaagtng</u>                            |    |
| М. | kansasii       | gcggcgtgcttaacacatgcaagtcg                          |    |
| М. | kubicae        | gtgcttaacacatgcaagtcg                               |    |
| М. | lentiflavum    | ggcggcgtgcttaacacatgcaagtcg                         |    |
| м. | mucogenicum    | gacgaacgctggcggcgtgcttaacacatgcaagtcg               |    |
| М. | parafinum      | cgtgcttaacacatgcaagtcg                              |    |
| М. | simiae         | ggcggcgtgcttaacanatgcaagtcg                         |    |
| М. | szulgai        | ggcggcgtgcttaacacatgcaagtcg                         |    |
| м. | tuberculosis   | ggcggcgtgcttaacacatgcaagtcg                         |    |

| М.    | abscessus      | aacgggaaaggcccttcggggtactcgagtggcgaacgggtgagtaacacgtgggtgatc 113 | L |
|-------|----------------|--|---|
|       |                |  |   |
| Μ.    | avium          | aacggaaaggcctcttcggaggtactcgagtggcgaacgggtgagtaacacgtgggcaat     |   |
|       |                |  |   |
| Μ.    | bovis          | aacggaaaggtctcttcggagatactcgagtggcgaacgggtgagtaacacgtgggtgat     |   |
|       |                |  |   |
| м     | chelonae       | aacgggaaaggcccttcggggtactcgagtggcgaacgggtgagtaacacgtgggtgatc     |   |
| •••   | onoronae       |  |   |
| M     | forginggon     |  |   |
| Μ.    | farcinogen     | aacggaaaggcccttcggggtactcgagtggcgaacgggtgagtaacacgtgggtgatct     |   |
|       | _              |  |   |
| Μ.    | fortuitum      | aacggaaaggcccttcgggtactcgagtggcgaacgggtgagtaacacgtgggtgatctg     |   |
|       |                |  |   |
| Μ.    | gordonae       | aacggtaaggcccttcgggntacacgagtggcgaacgggtgagtaacacgtgggtaatct     |   |
|       |                | 1 11111 1111 1111 1111 1111 1111 111111                          |   |
| Μ.    | heckeshornense | aacggaaaggcccgcttcggtgggtgctcgagtggcgaacgggtgagtaacacgtgggtg     |   |
|       |                |  |   |
| М.    | intercellulare | aacggaaagnccccttcggggtactcgagtggcgaacgggtgagtaacacgtgggcaatc     |   |
|       |                |  |   |
| м     | kansaii        | aacggaaaggtctcttcggagacactcgagtggcgaacgggtgagtaacacgtgggcaat     |   |
| 11.   | Kansaii        |  |   |
|       | look to a a    |  |   |
| м.    | kubicae        | aacggaaaggccccttcgggggtactcgagtggcgaacgggtgagtaacacgtgggtgat     |   |
|       |                |  |   |
| Μ.    | lentoflavum    | aacggaaaggcctcttcggaggtactcgagtggcgaacgggtgagtaacacgtgggtaat     |   |
|       |                |  |   |
| Μ.    | mucogenicum    | aacggaaaggcccttcggggtactcgagtggcgaacgggtgagtaacacgtgggtgatct     |   |
|       |                |  |   |
| М.    | parafinum      | aacggaaaggccccttcgggggtactcgagtggcgaacgggtgagtaacacgtnngcaat     |   |
|       | -              | 1  |   |
| М.    | simiae         | aacggaaaggccccttcgggggtactcgagtggcgaacgggtgagtaacacgtgggtaat     |   |
| •••   |                |  |   |
| м     | szulgai        | aacggaaagnccccttcgggntactcgagtggcgaacgggtgagtaacacgtgggtaatc     |   |
| 1,1 • | Szuryar        |  |   |
|       | h              |  |   |
| м.    | tuberculosis   | aacqqaaaqqtctcttcqqaqatactcqaqtqqcqaacqqqtqaqtaacacqtqqqtqat     |   |

| M. abscessus      | tgccctgcactctgggataagcctgggaaactgggtctaataccggataggaccacacac | 171 |
|-------------------|--|-----|
| M. avium          | ctgccctgcacttcgggataagcctgggaaactgggtctaataccggataggacctcaag |     |
| M. bovis          | ctgccctgcacttcgggataagcctgggaaactgggtctaataccggataggaccacggg |     |
| M. chelonae       | tgccctgcactctgggataagcctgggaaactgggtctaataccggataggaccacacac |     |
| M. farcinogen     | gccctgcactttgggataagcctgggaaactgggtctaataccggataggaccacgcgct |     |
| M. fortuitum      | ccctgcactttgggataagcctgggaaactgggtctaataccgaatatgaccgcgcactt |     |
| M. gordonae       | gccctgcacatcgggataagcctgggaaactgggtctaataccgaataggaccacaggac |     |
| M. heckeshornense | acctgccctgcacttcgggataagcctgggaaactgggtctaataccggataggaccgcg |     |
| M. intercellulare | tgccctgcacttcgggataagcctgggaaactgggtctaataccggataggacctttagg |     |
| M. kansaii        | ctgccctgcacaccgggataagcctgggaaactgggtctaataccggataggaccacttg |     |
| M. kubicae        | ctaccctgcacttcgggataagcctgggaaactgggtctaataccggataggaccatgag |     |
| M. lentoflavum    | ctgccctgcacttcgggataagcctgggaaactgggtctaataccggataggaccttttg |     |
| M. mucogenicum    | gccctgcactttgggataagcctgggaaactgggtctaataccgaataggaccacgcgct |     |
| M. parafinum      | ctgccctgcacttcgggataagcctgggaaactgggtctaataccggataggaccacttg |     |
| M. simiae         | ctgccctgcacttcgggataagcctgggaaactgggtctaataccggataggaccacttg |     |
| M. szulgai        | tgccctgcacttcgggataagcctgggaaactgggtctaataccggataggaccccgagg |     |
| M. tuberculosis   | ctgccctgcacttcgggataagcctgggaaactgggtctaataccggataggaccacggg |     |

| M. abscessus      | ttcatggtgagtggtgcaaagcttttgcggtgtgggatgagcccgcggcctatcagcttg   |
|-------------------|--|
| M. avium          |  |
|                   |  |
| M. bovis          | atgcatgtcttgtggtngaaagcgctttagcggtgtgggatgagcccgcggcctatcagc   |
|                   |  |
| M. chelonae       | ttcatggtgagtggtgcaaagcttttgcggtgtgggatgagcccgcgggcctatcagcttg  |
|                   |  |
| M. farcinogen     | tcatggtgtgtgggaaagcttttgcggtgtgggatgggcccgcgggcctatcagcttgt    |
|                   |  |
| M. fortuitum      | cctggtgtgtggtggaaagcttttgcggtgtgggatgggcccgcgggcctatcagcttgtt  |
|                   |  |
| M. gordonae       | acatgtcctgtggtggaaagcttttgcggtgtgggatgggcccgcgggcctatcagcttgt  |
|                   |  |
| M. heckeshornense | ccatgcatgtggtggtggaaagcgtgtggtagtggtgtgggatgggcccgcgggcctat    |
|                   |  |
| M. intercellulare | cgcatgtctttaggtggaaagcttttgcggtgtgggatgggcccgcgggcctatcagcttg  |
|                   |  |
| M. kansaii        | gcgcatgccttgtggtggaaagcttttgcggtgtgggatgggcccgcgggcctatcagctt  |
|                   |  |
| M. kubicae        | atgcatgtcttatggtggaaagcttttgcggtgtggggatgggcccgcgggcctatcagctt |
|                   |  |
| M. lentoflavum    | gcgcatgccttttggtggaaagcttttgcggtgtggggatgggcccgcgggcctatcagctt |
|                   |  |
| M. mucogenicum    | tcatggtgtgtgggaaagcttttgcggtgtgggatgggcccgcgggcctatcagcttgt    |
|                   |  |
| M. parafinum      | gcgcatgccttgtggtggaaagcttttgcggtgtgggatgggcccgcgggcctatcagctt  |
|                   |  |
| M. simiae         | gcgcatgccttgtggtggaaagcttttgcggtgtgggatgggcccgcgggcctatcagctt  |
|                   |  |
| M. szulgai        | cgcatgccttggggtggaaagcttttgcggtgtgggatgggcccgcgggcctatcagcttg  |
|                   |  |
| M. tuberculosis   | atgcatgtcttctggtggaaagcgctttagcggtgtggggatgagcccgcgggcctatcagc |
|                   |  |

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| Μ. | abscessus      | Ttggtggggtaatggcccaccaaggcgacgacgggtagccggcctgagagggtgaccggc | 2 |
|----|----------------|--|---|
|    |                |  |   |
| Μ. | avium          | gttggtggggtgacggcctaccaaggcgacgacgggtagccggcctgagagggtgtccgg |   |
|    |                |  |   |
| Μ. | bovis          | ttgttggtggggtnacggcctaccaaggcgacgacgggtagccggcctgagagggtgtcc |   |
|    |                |  |   |
| Μ. | chelonae       | ttggtggggtaatggcccaccaaggcgacgacgggtagccggcctgagagggtgaccggc |   |
|    |                |  |   |
| Μ. | farcinogen     | tggtggggtaatggcctaccaaggcgacgacgggtagccggcctgagagggtgaccggcc |   |
|    |                |  |   |
| Μ. | fortuitum      | ggtggggtaatggcctaccaaggcgacgacgggtagccggcctgagagggtgaccggcca |   |
|    |                |  |   |
| Μ. | gordonae       | tggtggggtgatggcctaccaaggcgacgacgggtagccggcctgagagggtgtccggcc |   |
|    |                |  |   |
| Μ. | heckeshornense | cagcttgttggtggggtgatggcctaccaaggcgacgacgggtagccggcctgagagggt |   |
|    |                |  |   |
| М. | intercellulare | ttggtggggtgatggcctaccaaggcgacgacgggtagccggcctgagagggtgtccggc |   |
|    |                |  |   |
| Μ. | kansaii        | gttggtggggtgacggcctaccaaggcgacgacgggtagccggcctgagagggtgtccgg |   |
|    |                |  |   |
| Μ. | kubicae        | gttggtggggtgacggcctaccaaggcgacgacgggtagccggcctgagagggtgtccgg |   |
|    |                |  |   |
| Μ. | lentoflavum    | gttggtggggtgacggcctaccaaggcgacgacgggtagccggcctgagagggtgtccgg |   |
|    |                |  |   |
| Μ. | mucogenicum    | tggtggggtaatggcctaccaaggcgacgacgggtagccggcctgagagggtgaccggcc |   |
|    | -              |  |   |
| Μ. | parafinum      | gttggtggggtgatggcctaccaaggcgacgacgggtagccggcctgagagggtgtccgg |   |
|    | -              |  |   |
| Μ. | simiae         | gttggtggggtgacggcctaccaaggcgacgacgggtagccggcctgagagggtgtccgg |   |
|    |                |  |   |
| М. | szulgai        | ttggtggggtgacggcctaccaaggcgacgacgggtagccggcctgagagggtgtccggc |   |
|    | •              |  |   |
| М. | tuberculosis   | ttgttggtggggtgacggcctaccaaggcgacgacgggtagccggcctgagagggtgtcc |   |
|    |                |  |   |

| Μ. | abscessus      | cacactgggactgagatacggcccagactcctacgggaggcagcagtggggaatattgca | 3 |
|----|----------------|--|---|
|    |                |  |   |
| Μ. | avium          | ccacactgggactgagatacggcccagactcctacgggaggcagcagtggggaatattgc |   |
|    |                |  |   |
| Μ. | bovis          | ggccacactgggactgagatacggcccagactcctacgggaggcagcagtggggaatatt |   |
|    |                |  |   |
| Μ. | chelonae       | cacactgggactgagatacggcccagactcctacgggaggcagcagtggggaatattgca |   |
|    |                |  |   |
| Μ. | farcinogen     | acactgggactgagatacggcccagactcctacgggaggcagcagtggggaatattgcac |   |
|    |                |  |   |
| Μ. | fortuitum      | cactgggactgagatacggcccagactcctacgggaggcagcagtggggaatattgcaca |   |
|    |                |  |   |
| Μ. | gordonae       | acactgggactgagatacggcccagactnctacgggaggcagcagtggggaatattgcac |   |
|    |                |  |   |
| Μ. | heckeshornense | gtccggccacactgggactgagatacggcccagactcctacgggaggcagcagtggggaa |   |
|    |                |  |   |
| Μ. | intercellulare | cacactgggactgagatacggcccagactnctacgggaggcagcagtggggaatattgca |   |
|    |                |  |   |
| Μ. | kansaii        | ccacactgggactgagatacggcccagactcctacgggaggcagcagtggggaatattgc |   |
|    |                |  |   |
| Μ. | kubicae        | ccacactgggactgagatacggcccagactcctacgggaggcagcagtggggaatattgc |   |
|    |                |  |   |
| Μ. | lentoflavum    | ccacactgggactgagatacggcccagactcctacgggaggcagcagtggggaatattgc |   |
|    |                |  |   |
| Μ. | mucogenicum    | acactgggactgagatacggcccagactcctacgggaggcagcagtggggaatattgcac |   |
|    |                |  |   |
| Μ. | parafinum      | ccacactgggactgagatacggcccagactcctacgggaggcagcagtggggaatattgc |   |
|    |                |  |   |
| Μ. | simiae         | ccacactgggactgagatacggcccagactnctacgggaggcagcagtggggaatattgc |   |
|    |                |  |   |
| Μ. | szulgai        | cacactgggactgagatacggcccagactcntacgggaggcagcagtggggaatattgca |   |
|    |                |  |   |
| Μ. | tuberculosis   | ggccacactgggactgagatacggcccagactcctacgggaggcagcagtggggaatatt |   |
|    |                |  |   |

|     | 1               |  | 411 |
|-----|-----------------|--|-----|
| М.  | abscessus       | caatgggcgcaagcctgatgcagcgacgccgcgtgagggatgacggccttcgggttgtaa | 411 |
| М.  | avium           | acaatgggcgcaagcctgatgcagcgacgccgtgggggatgacggccttcgggttgta   |     |
|     |                 |  |     |
| Μ.  | bovis           | gcacaatgggcgcaagcctgatgcagcgacgccgcgtgggggatgacggccttcgggttg |     |
|     |                 |  |     |
| Μ.  | chelonae        | caatgggcgcaagcctgatgcagcgacgccgcgtgagggatgacggccttcgggttgtaa |     |
|     |                 |  |     |
| Μ.  | farcinogen      | aatgggcgcaagcctgatgcagcgacgccgcgtgagggatgacggccttcgggttgtaaa |     |
|     |                 |  |     |
| Μ.  | fortuitum       | atgggcgcaagcctgatgcagcgacgccgcgtgagggatgacggccttcgggttgtaaac |     |
|     |                 |  |     |
| Μ.  | gordonae        | aatgggcgaaagcctgatgcagcgacgccgcgtgggggatgacggccttcgggttgtaaa |     |
|     |                 |  |     |
| М.  | heckeshornense  | tattgcacaatgggcgcaagcctgatgcagcgacgccgcgtgggggatgacggccttcgg |     |
|     |                 |  |     |
| М.  | intercellulare  | caatgggcgcaagcctgatgcagcgacgccgcgtgggggatgacggccttcgggttgtaa |     |
|     | , , ,           |  |     |
| м.  | kansaii         | acaatgggcgcaagcctgatgcagcgacgccgtgggggatgacggccttcgggttgta   |     |
| M   | kubicae         | acaatgggcgcaagcctgatgcagcgacgccgcgtgggggatgacggccttcgggttgta |     |
| Μ.  | Kubicae         | acaacgggcgcaagcctgacgcagcgacgccgcgcgggggacgacggcccccgggctgca |     |
| м   | lentoflavum     | acaatgggcgcaagcctgatgcagcgacgccgcgtgggggatgacggccttcgggttgta |     |
| 11. | ICIICOII a vaii |  |     |
| М.  | mucogenicum     | aatgggcgcaagcctgatgcagcgacgccgtgagggatgacggccttcgggttgtaaa   |     |
|     |                 |  |     |
| М.  | parafinum       | acaatgggcgcaagcctgatgcagcgacgccgtgggggatgacggccttcgggttgta   |     |
|     | F               |  |     |
| Μ.  | simiae          | acaatgggcgcaagcctgatgcagcgacgccgcgtgggggatgacggccttcgggttgta |     |
|     |                 |  |     |
| Μ.  | szulgai         | caatgggcgcaagcctgatgcagcgacgccgcgtgggggatgacggccttcgggttgtaa |     |
|     |                 |  |     |
| Μ.  | tuberculosis    | gcacaatgggcgcaagcctgatgcagcgacgccgcgtgggggatgacggccttcgggttg |     |

| М.   | abscessus        | acctctttcagtagggacgaagcgaaagtgacggtacctacagaagaaggaccggccaac | 471 |
|------|------------------|--|-----|
|      |                  |  |     |
| Μ.   | avium            | aacctctttcaccatcgacgaaggtccgggttttctcggattgacggtaggtggagaaga |     |
|      |                  |  |     |
| Μ.   | bovis            | taaacctctttcaccatcgacgaaggtccgggttctctctc                    |     |
|      |                  |  |     |
| Μ.   | chelonae         | acctctttcagtagggacgaagcgaaagtgacggtacctacagaagaaggaccggccaac |     |
|      |                  |  |     |
| М.   | farcinogen       | cctctttcaatagggacgaagcgcaagtgacggtacctatagaagaaggaccggccaact |     |
|      |                  |  |     |
| Μ.   | fortuitum        | ctctttcaatagggacgaagcgcaagtgacggtacctatagaagaaggaccggccaacta |     |
|      |                  |  |     |
| М.   | gordonae         | cctctttcaccatcgacgaaggtccgggttttctcgggctgacggtaggtggagaagaag |     |
|      |                  |  | •   |
| М.   | heckeshornense   | gttgtaaacctctttcaccatcgacgaagccgcagcttttgttgtggtgacggtaggtgg |     |
| 1.6  | 4-6              |  |     |
| м.   | intercellulare   | acctctttcaccatcgacgaaggtccgggttttctcggattgacggtaggtggagaagaa |     |
| M    | kansaii          |  |     |
| 141. | Kalisall         |  |     |
| м    | kubicae          | aacctctttcaqcaqqqacqaaqcqcaaqtqacqqtacctqcaqaaqaaqcaccqqccaa |     |
| 1.1. | Rubicac          | aacccccccaycayyacyaaycycaaycyacygcacccycayaayaaycaccgyccaa   |     |
| М.   | lentoflavum      | aacctctttcagcagggacgaagcgcaagtgacggtacctgcagaagaagcaccggccaa |     |
|      | 101100114 / 4111 |  |     |
| М.   | mucogenicum      | cctctttcaatagggacgaagcgcaagtgacggtacctatagaagaagcaccggccaact |     |
|      |                  |  |     |
| М.   | parafinum        | aacctctttcaccatcgacgaaggctcacttcgtgagttgacggtaggtggagaagaagc |     |
|      | •                |  |     |
| М.   | simiae           | aacctctttcagcagggacgaagcgcaagtgacggtacctgcagaagaagcaccggccaa |     |
|      |                  |  |     |
| Μ.   | szulgai          | acctctttcaccatcgacgaaggtccgggttttctcggattgacggtaggtggagaagaa |     |
|      |                  |  |     |
| Μ.   | tuberculosis     | taaacctctttcaccatcgacgaaggtccgggttctctctc                    |     |

M. abscessus tacqtqccaqcaqcqcqqtaatacqtaqqqtccqaqcqttqtccqqaattactqqqcqt M. avium agcaccggccaactacgtgccagcagccgcggtaatacgtagggtgcgagcgttgtccgg M. bovis gaagcaccggccaactacgtgccagcagccgcggtaatacgtagggtgcgagcgttgtcc chelonae tacqtqccaqcaqccqcqqtaatacqtaqqqtccqaqcqttqtccqqaattactqqqcqt M. farcinogen acgtgccagcagccgcggtaatacgtagggtccgagcgttgtccggaattactgggcgtafortuitum cgtgccagcagccgcggtaatacgtagggtccgagcgttgtccggaattactgggcgtaa gordonae caccggccaactacgtgccagcagccgcgntaatacgtagggtgcgagcgttgtccggaa heckeshornense agaagaagcaccggccaactacgtgccagcagccgcggtaatacgtagggtgcaagcgtt M. intercellulare M. kansaii agcaccggccaactacgtgccagcagccgcgntaatacgtagggtgcgagcgttgtccgg M. kubicae ctacgtgccagcagccgcggtaatacgtagggtgcgagcgttgtccggaattactgggcg M. lentoflavum ctacgtgccagcagccgcggtaatacgtagggtgcgagcgttgtccggaattactgggcg M. mucogenicum acqtqccaqcaqccqcqqtaatacqtagqgtqcgaqcqttqtccggaattactgggcgta M. parafinum accggccaactacgtgccagcagccgcggtaatacgtagggtgcgagcgttgtccggaat M. simiae ctacqtqccaqcaqccqcqqtaatacqtaqqqtqcqaqcqttqtcnqqaattactqggcq gcaccggccaactacgtgccagcagccgcggtaatacgtagggtgcgagcgttgtccgga M. szulgai M. tuberculosis qaagcaccggccaactacgtgccagcagccgcggtaatacgtagggtgcgagcgttgtcc

| м     | abscessus      | aaagagctcgtaggtggtttgtcgcgttgttcgtgaaaactcacagcttaactgtgggcg            | 591 |
|-------|----------------|---|-----|
| 141 . | abscessus      |   | 331 |
| М.    | avium          | aattactgggcgtaaagagctcgtaggtggtttgtcgcgttgttcgtgaaatctcacggc            |     |
|       |                |   |     |
| Μ.    | bovis          | ggaattactgggcgtaaagagctcgtaggtggtttgtcgcgttgttcgtgaaatctcacg            |     |
|       |                |   |     |
| Μ.    | chelonae       | aaagagctcgtaggtggtttgtcgcgttgttcgtgaaaactcacagcttaactgtgggcg            |     |
|       |                |   |     |
| Μ.    | farcinogen     | aagagctcgtaggtggtttgtcgcgttgttcgtgaaaactcacagcttaactgtgggcgt            |     |
|       |                |   |     |
| Μ.    | fortuitum      | agagctcgtaggtggtttgtcgcgttgttcgtgaaaactcacagcttaactgtgggcgtg            |     |
|       |                |   |     |
| М.    | gordonae       | ttactgggcgtaaagagctcgtaggtggtttgtcgcgttgttcgtgaaatctcacggctt            |     |
|       |                |   |     |
| М.    | heckeshornense | gtccggaattactgggcgtaaagagctcgtaggcggcttgtcgcgttgttcgtggaatgc            |     |
| 3.4   | intoncollulous |   |     |
| Μ.    | intercellulare | attactgggcgtaaagagctcgtaggtggtttgtcgcgttgttcgtgaaatctcacggct            |     |
| м     | kansaii        | aattactgggcgtaaagagctcgtaggtggtttgtcgcgttgttcgtgaaatctcacggc            |     |
| 11.   | Kansaii        |   |     |
| М.    | kubicae        | taaaqagctcqtaqqtqqtttqtcqcqttqttcqtqaaaaccgggggcttaaccctcggc            |     |
|       | Rubicuc        |   |     |
| М.    | lentoflavum    | taaagagctcgtaggtggtttgtcgcgttgttcgtgaaaaccgggggcttaaccctcggc            |     |
|       |                |   |     |
| М.    | mucogenicum    | aagagctcgtaggtggtttgtcgcgttgttcgtgaaaactcacagcttaactgtgggcgt            |     |
|       | •              |   |     |
| М.    | parafinum      | tactgggcgtaaagagctcgtaggtggtttgtcgcgttgttcgtgaaatctcacggctta            |     |
|       |                |   |     |
| Μ.    | simiae         | taaagagctcgtaggtggtttgtcgcgttgttcgtgaaaaccggggggcttaaccctcggc           |     |
|       |                |   |     |
| Μ.    | szulgai        | $\verb attactgggcgtaaagagctcgtaggtggtttgtcgcgttgttcgtgaaatctcacggct \\$ |     |
|       |                |   |     |
| Μ.    | tuberculosis   | ggaattactgggcgtaaagagctcgtaggtggtttgtcgcgttgttcgtgaaatctcacg            |     |

| abscessus      | tgcgggcgatacgggcagactagagtactgcaggggagactggaattcctggtgtagcgg   |
|----------------|--|
|                |  |
| avium          | ttaactgtgagcgtgcgggcgatacgggcagactagagtactgcaggggagactggaatt   |
|                |  |
| bovis          | gcttaactgtgagcgtgcgggcgatacgggcagactagagtactgcaggggagactggaa   |
|                |  |
| chelonae       | tgcgggcgatacgggcagactagagtactgcaggggagactggaattcctggtgtagcgg   |
|                |  |
| farcinogen     | gcgggcgatacgggcagactagagtactgcaggggagactggaattcctggtgtagcggt   |
|                |  |
| fortuitum      | cgggcgatacgggcagactagagtactgcaggggagactggaattcctggtgtagcggtg   |
|                |  |
| gordonae       | aactgtgagcgtgcggncgatacgggcagacttgagtactgcagggggagactggaattcc  |
|                |  |
| heckeshornense | cacagettaactgtgggegtgegggegatacgggeaggetggagtgetgeaggggagaet   |
|                |  |
| intercellulare | taactgtgagcgtgcgggcgatacgggcagactagagtactgcagggggagactggaattc  |
|                |  |
| kansaii        | ttaactgtgagcgtgcgngcgatacgggcagactagagtactgcaggggagactggaatt   |
|                |  |
| kubicae        | gtgcgggcgatacgggcagactggagtactgcaggggagactggaattcctggtgtagcg   |
|                |  |
| lentoflavum    | gtgcgggcgatacgggcagactggagtactgcaggggagactggaattcctggtgtagcg   |
|                |  |
| mucogenicum    | gcgggcgatacgggcagactagagtactgcaggggagactggaattcctggtgtagcggt   |
|                |  |
| parafinum      | actgtgagcgtgcgggcgatacgggcagactagagtactgcagggggagactggaattcct  |
|                |  |
| simiae         | gtgcgggcgatacgggcagactggagtactgcaggggagactggaattcctggtgtagcg   |
|                |  |
| szulgai        | taactgtgagcgtgcggncgatacgggcagactggagtactgcagggggagactggaattc  |
|                |  |
| tuberculosis   | gcttaactgtgagcgtgcgggcgatacgggcagactagagtactgcaggggagactggaa   |
|                | abscessus avium bovis chelonae farcinogen fortuitum gordonae heckeshornense intercellulare kansaii kubicae lentoflavum mucogenicum parafinum simiae szulgai tuberculosis |

| М. | abscessus      | tggaatgcgcagatatcaggaggaacaccggtggcgaaggcgggtctctgggcagtaact |
|----|----------------|--|
| М. | avium          | cctggtgtagcggtggaatgcgcagatatcaggaggaacaccggtggcgaaggcgggtct |
| М. | bovis          | ttcctggtgtagcggtggaatgcgcagatatcaggaggaacaccggtgncgaaggcgggt |
| М. | chelonae       | tggaatgcgcagatatcaggaggaacaccggtggcgaaggcgggtctctgggcagtaact |
| М. | farcinogen     | ggaatgcgcagatatcaggaggaacaccggtggcgaaggcgggtctctgggcagtaactg |
| М. | fortuitum      | gaatgcgcagatatcaggaggaacaccggtggcgaaggcgggtctctgggcagtaactga |
| М. | gordonae       | tggtgtagcggtggaatgcgcagatatcaggaggaacaccggtggcgaaggcgggtctct |
| М. | heckeshornense | ggaattcctggtgtagcggtggaatgcgcagatatcaggaggaacaccggtggcgaaggc |
| М. | intercellulare | ctggtgtagcggtggaatgcgcagatatcaggaggaacaccggtggcgaaggcgggtctc |
| М. | kansaii        | cctggtgtagcggtggaatgcgcagatatcaggaggaacaccggtggcgaaggcgggtct |
| М. | kubicae        | gtggaatgcgcagatatcaggaggaacaccggtggcgaaggcgggtctctgggcagtaac |
| М. | lentoflavum    | gtggaatgcgcagatatcaggaggaacaccggtggcgaaggcgggtctctgggcagtaac |
| М. | mucogenicum    | ggaatgcgcagatatcaggaggaacaccggtggcgaaggcgggtctctgggcagtaactg |
| М. | parafinum      | ggtgtagcggtggaatgcgcagatatcaggaggaacaccggtggcgaaggcgggtctctg |
| М. | simiae         | gtggaatgcgcagatatcaggaggaacaccggtggcgaaggcgggtctctgggcagtaac |
| М. | szulgai        | ctggtgtagcngtggaatgcgcagatatcaggaggaacaccggtggcgaaggcgggtctc |
| М. | tuberculosis   | ttcctggtgtagcggtggaatgcgcagatatcaggaggaacaccggtggcgaaggcgggt |

711

| М. | abscessus      | acatgcaagtcg  | 51 |
|----|----------------|---|----|
| М. | avium          | gacgaacgctggcgtgcttaacacatgcaagtcg                  |    |
| М. | bovis          | gcggcgtgcttaacacatgcaagtcg                          |    |
| М. | chelonae       | gacgaacgctggcgtgcttaacacatgcaagtcg                  |    |
| М. | farcinogen     | cgaacgctcgcggcgtgcttaacacatgcaagtcg                 |    |
| М. | fortuitum      | ggcggcgtgcttaacacatgcaagtcg                         |    |
| М. | gordonae       | ggcggcgtgcttaacacatgcaagtcg                         |    |
| М. | heckeshornense | tgatcctggctcaggacgaacgctggcggcgtgcttaacacatgcaagtcg |    |
| М. | intercellulare | ttaacacatgcaagtng                                   |    |
| Μ. | kansasii       | gcggcgtgcttaacacatgcaagtcg                          |    |
| Μ. | kubicae        | gtgcttaacacatgcaagtcg                               |    |
| М. | lentiflavum    | ggcggcgtgcttaacacatgcaagtcg                         |    |
| Μ. | mucogenicum    | gacgaacgctggcggcgtgcttaacacatgcaagtcg               |    |
| М. | parafinum      | cgtgcttaacacatgcaagtcg                              |    |
| М. | simiae         | ggcggcgtgcttaacanatgcaagtcg                         |    |
| Μ. | szulgai        | ggcggcgtgcttaacacatgcaagtcg                         |    |
| М. | tuberculosis   | ggcggcgtgcttaacacatgcaagtcg                         |    |

| M. abscessus      | aacgggaaaggcc-cttcgg-ggtact-cgagtggcgaacgggtgagtaacacgtgggtgat 111          |
|-------------------|---|
| M. avium          | aacggaaaggcct-cttcggaggtact-cgagtggcgaacgggtgagtaacacgtgggcaat              |
| M. bovis          | aacggaaaggtct-cttcggagatact-cgagtggcgaacgggtgagtaacacgtgggtgat              |
| M. chelonae       | aacgggaaaggcc-cttcgg-ggtact-cgagtggcgaacgggtgagtaacacgtgggtgat              |
| M. farcinogen     | aacggaaaggcccttcggg-gtact-cgagtggcgaacgggtgagtaacacgtgggtgat<br>            |
| M. fortuitum      | aacggaaaggcccttcgggtact-cgagtggcgaacgggtgagtaacacgtgggtgat                  |
| M. gordonae       | <pre>aacggtaaggcccttcgggn-taca-cgagtggcgaacgggtgagtaacacgtgggtaat</pre>     |
| M. heckeshornense | <pre>aacggaaaggcccgcttcggtgggtgctcgagtggcgaacgggtgagtaacacgtgggtgac</pre>   |
| M. intercellulare | <pre>aacggaaagnccc-cttcggggtactcgagtggcgaacgggtgagtaacacgtgggcaat</pre>     |
| M. kansaii        | <pre>aacggaaaggtct-cttcggagac-actcgagtggcgaacgggtgagtaacacgtgggcaat  </pre> |
| M. kubicae        | aacggaaaggccc-cttcgggggt-actcgagtggcgaacgggtgagtaacacgtgggtgat              |
| M. lentoflavum    | <pre>aacggaaaggcct-cttcggaggt-actcgagtggcgaacgggtgagtaacacgtgggtaat</pre>   |
| M. mucogenicum    | <pre>aacggaaaggcccttcgg-ggt-actcgagtggcgaacgggtgagtaacacgtgggtgat</pre>     |
| M. parafinum      | aacggaaaggccc-cttcgggggt-actcgagtggcgaacgggtgagtaacacgtnngcaat              |
| M. simiae         | aacggaaaggccc-cttcgggggt-actcgagtggcgaacgggtgagtaacacgtgggtaat<br>          |
| M. szulgai        | aacggaaagnccc-cttcgggn-t-actcgagtggcgaacgggtgagtaacacgtgggtaat              |
| M. tuberculosis   | aacggaaaggtct-cttcggagat-actcgagtggcgaacgggtgagtaacacgtgggtgat              |

| М. | abscessus      | ctgccctgcactctgggataagcctgggaaactgggtctaataccggataggaccacaca          | 171 |
|----|----------------|---|-----|
|    |                |   |     |
| М. | avium          | ctgccctgcacttcgggataagcctgggaaactgggtctaataccggataggacctcaag          |     |
| М. | bovis          | ctgccctgcacttcgggataagcctgggaaactgggtctaataccggataggaccacggg          |     |
| М. | chelonae       | ctgccctgcactctgggataagcctgggaaactgggtctaataccggataggaccacaca          |     |
| Μ. | farcinogen     | ctgccctgcactttgggataagcctgggaaactgggtctaataccggataggaccacgcg          |     |
| М. | fortuitum      | ctgccctgcactttgggataagcctgggaaactgggtctaataccgaatatgaccgcgca          |     |
|    |                |   |     |
| Μ. | gordonae       | ctgccctgcacatcgggataagcctgggaaactgggtctaataccgaataggaccacagg          |     |
| М. | heckeshornense | ctgccctgcacttcgggataagcctgggaaactgggtctaataccggataggaccgcc            |     |
| М. | intercellulare | ctgccctgcacttcgggataagcctgggaaactgggtctaataccggataggacctttag          |     |
| М. | kansaii        | ctgccctgcacaccgggataagcctgggaaactgggtctaataccggataggaccacttg          |     |
| М. | kubicae        | ctaccctgcacttcgggataagcctgggaaactgggtctaataccggataggaccatgag          | ı   |
| М. | lentoflavum    | ctgccctgcacttcgggataagcctgggaaactgggtctaataccggataggaccttttg          | ı   |
| М. | mucogenicum    | ctgccctgcactttgggataagcctgggaaactgggtctaataccgaataggaccacgcg          |     |
| М. | parafinum      | ctgccctgcacttcgggataagcctgggaaactgggtctaataccggataggaccacttg          |     |
| М. | simiae         | ctgccctgcacttcgggataagcctgggaaactgggtctaataccggataggaccacttg          |     |
| Μ. | szulgai        | ctgccctgcacttcgggataagcctgggaaactgggtctaataccggataggaccccgag          |     |
| М. | tuberculosis   | $\verb ctgccctgcacttcgggataagcctgggaaactgggtctaataccggataggaccacggg $ |     |

| Μ. | abscessus      | cttcatggtgagtggtgcaaagc-ttttgcggtgtgggatgagcccgcgggcctatca                   | 231 |
|----|----------------|--|-----|
| Μ. | avium          | <pre>acgcatgtcttctggtggaaagc-ttttgcggtgtggggatgggcccgcgggcctatca  </pre>     |     |
| М. | bovis          | <pre>atgcatgtcttgtggtngaaagcgctttagcggtgtggggatgagcccgcgggcctatca  </pre>    |     |
| М. | chelonae       | cttcatggtgagtggtgcaaagc-ttttgcggtgtggggatgagcccgcggcctatca                   |     |
| М. | farcinogen     | cttcatggtgtgtgggaaagc-ttttgcggtgtggggatgggcccgcgggcctatca                    |     |
| М. | fortuitum      | cttcctggtgtgtggtggaaagc-ttttgcggtgtggggatgggcccgcgggcctatca                  |     |
| М. | gordonae       | acacatgtcctgtggtggaaagc-ttttgcggtgtggggatgggcccgcgggcctatca                  |     |
| М. | heckeshornense | atgcatgtggtggtgggaaagcgtgtggtagtggtgtgggatgggcccgcgggcctatca                 |     |
| М. | intercellulare | <pre>gcgcatgtctttaggtggaaagc-ttttgcggtgtggggatgggcccgcgggcctatca      </pre> |     |
| М. | kansaii        | <pre>gcgcatgccttgtggtggaaagc-ttttgcggtgtggggatgggcccgcgggcctatca  </pre>     |     |
| М. | kubicae        | atgcatgtcttatggtggaaagc-ttttgcggtgtggggatgggcccgcgggcctatca                  |     |
| М. | lentoflavum    | gcgcatgccttttggtggaaagc-ttttgcggtgtgggatgggcccgcgggcctatca                   |     |
| М. | mucogenicum    | cttcatggtgtggtggaaagc-ttttgcggtgtgggatgggcccgcgggcctatca                     |     |
| М. | parafinum      | gcgcatgccttgtggtggaaagc-ttttgcggtgtggggatgggcccgcgggcctatca                  |     |
| М. | simiae         | <pre>gcgcatgccttgtggtggaaagc-ttttgcggtgtggggatgggcccgcgggcctatca</pre>       |     |
| М. | szulgai        | gcgcatgccttggggtggaaagc-ttttgcggtgtgggatgggcccgcgggcctatca                   |     |
| Μ. | tuberculosis   | atgcatgtcttctggtggaaagcgctttagcggtgtggggatgagcccgcgggcctatca                 |     |

| М. | abscessus      | gcttgttggtggggtaatggcccaccaaggcgacgacgggtagccggcctgagagggtga | 291 |
|----|----------------|--|-----|
| М. | avium          | gcttgttggtggggtgacggcctaccaaggcgacgacgggtagccggcctgagagggtgt |     |
| М. | bovis          | gcttgttggtggggtnacggcctaccaaggcgacgacgggtagccggcctgagagggtgt |     |
| М. | chelonae       | gcttgttggtggggtaatggccaccaaggcgacgacgggtagccggcctgagagggtga  |     |
| М. | farcinogen     | gcttgttggtggggtaatggcctaccaaggcgacgacgggtagccggcctgagagggtga |     |
| М. | fortuitum      | gcttgttggtggggtaatggcctaccaaggcgacgacgggtagccggcctgagagggtga |     |
| М. | gordonae       | gcttgttggtggggtgatggcctaccaaggcgacgacgggtagccggcctgagagggtgt |     |
| М. | heckeshornense | gcttgttggtggggtgatggcctaccaaggcgacgacgggtagccggcctgagagggtgt |     |
| М. | intercellulare | gcttgttggtggggtgatggcctaccaaggcgacgacgggtagccggcctgagagggtgt |     |
| М. | kansaii        | gcttgttggtggggtgacggcctaccaaggcgacgacgggtagccggcctgagagggtgt |     |
| М. | kubicae        | gcttgttggtggggtgacggcctaccaaggcgacgacgggtagccggcctgagagggtgt |     |
| М. | lentoflavum    | gcttgttggtggggtgacggcctaccaaggcgacgacgggtagccggcctgagagggtgt |     |
| М. | mucogenicum    | gcttgttggtgggtaatggcctaccaaggcgacgacgggtagccggcctgagagggtga  |     |
| М. | parafinum      | gcttgttggtggggtgatggcctaccaaggcgacgacgggtagccggcctgagagggtgt |     |
| М. | simiae         | gettgttggtggggtgacggcetaccaaggcgacgacgggtagccggcctgagagggtgt |     |
| М. | szulgai        | gcttgttggtggggtgacggcctaccaaggcgacgacgggtagccggcctgagagggtgt |     |
| М. | tuberculosis   | gcttgttggtggggtgacggcctaccaaggcgacgacgggtagccggcctgaga-ggtgt |     |

M. abscessus ccggccacactgggactgagatacggcccagactcctacgggaggcagcagtggggaata ccggccacactgggactgagatacggcccagactcctacgggaggcagcagtggggaata M. avium M. bovis ccggccacactgggactgagatacggcccagactcctacgggaggcagcagtggggaata ccqqccacactqqqactqaqatacqqcccaqactcctacqqqaqgcaqcaqtqqqqaata M. chelonae M. farcinogen ccqqccacactqqqactqaqatacqqcccaqactcctacqqqaqqcaqcaqtqqqqaata ccggccacactgggactgagatacggcccagactcctacgggaggcagcagtggggaata M. fortuitum ccqqccacactqqqactqaqatacqqcccaqactnctacqqqaggcaqcaqtqgqgaata M. gordonae M. heckeshornense ccqqccacactqqqactqagatacqqcccaqactcctacqqqaqqcaqcagtqqqqaata M. intercellulare ccggccacactgggactgagatacggcccagactnctacgggaggcagcagtggggaata ccggccacactgggactgagatacggcccagactcctacgggaggcagcagtggggaata M. kansaii M. kubicae ccqqccacactqqqactqaqatacqqcccaqactcctacqqqagqcaqcaqtqgqqaata M. lentoflavum ccqqccacactqqqactqaqatacgqcccagactcctacgggaggcagcagtggggaata  $\verb|ccggccacactgggactgagatacggcccagactcctacgggaggcagcagtggggaata|\\$ M. mucogenicum  $\verb|ccggccacactgggactgagatacggcccagactcctacgggaggcagcagtggggaata|\\$ M. parafinum ccggccacactgggactgagatacggcccagactnctacgggaggcagcagtggggaata M. simiae ccggccacactgggactgagatacggcccagactcntacgggaggcagcagtggggaata M. szulgai ccqqccacactqqqactqaqatacqqcccagactcctacgggaggcagcagtggggaata M. tuberculosis

| М. | abscessus      | ttgcacaatgggcgcaagcctgatgcagcgacgccgcgtgagggatgacggccttcgggt  | 411 |
|----|----------------|---|-----|
| М. | avium          | ttgcacaatgggcgcaagcctgatgcagcgacgccgcgtgggggatgacggccttcgggt  |     |
| М. | bovis          | ttgcacaatgggcgcaagcctgatgcagcgacgccgcgtggggggatgacggcctt-gggt |     |
| М. | chelonae       | ttgcacaatgggcgcaagcctgatgcagcgacgccgcgtgagggatgacggccttcgggt  |     |
| М. | farcinogen     | ttgcacaatgggcgcaagcctgatgcagcgacgccgcgtgagggatgacggccttcgggt  |     |
| М. | fortuitum      | ttgcacaatgggcgcaagcctgatgcagcgacgccgcgtgagggatgacggccttcgggt  |     |
| М. | gordonae       | ttgcacaatgggcgaaagcctgatgcagcgacgccgcgtggggggatgacggccttcgggt |     |
| М. | heckeshornense | ttgcacaatgggcgcaagcctgatgcagcgacgccgcgtggggggatgacggccttcgggt |     |
| М. | intercellulare | ttgcacaatgggcgcaagcctgatgcagcgacgccgcgtgggggatgacggccttcgggt  |     |
| М. | kansaii        | ttgcacaatgggcgcaagcctgatgcagcgacgccgcgtgggggatgacggccttcgggt  |     |
| М. | kubicae        | ttgcacaatgggcgcaagcctgatgcagcgacgccgtggggggatgacggccttcgggt   |     |
| М. | lentoflavum    | ttgcacaatgggcgcaagcctgatgcagcgacgccgcgtgggggatgacggccttcgggt  |     |
| М. | mucogenicum    | ttgcacaatgggcgcaagcctgatgcagcgacgccgcgtgagggatgacggccttcgggt  |     |
| М. | parafinum      | ttgcacaatgggcgcaagcctgatgcagcgacgccgcgtgggggatgacggccttcgggt  |     |
| М. | simiae         | ttgcacaatgggcgcaagcctgatgcagcgacgccgcgtgggggatgacggccttcgggt  |     |
| М. | szulgai        | ttgcacaatgggcgcaagcctgatgcagcgacgccgcgtgggggatgacggccttcgggt  |     |
| М. | tuberculosis   | ttgcacaatgggcgcaagcctgatgcagcgacgccgcgtgggggatgacggccttcgggt  |     |

| М. | abscessus      | tgtaaacctctttcagtagggacgaagcgaaagtgacggtacctacagaagaaggaccgg  | 471 |
|----|----------------|---|-----|
| М. | avium          | tgtaaacctctttcaccatcgacgaaggtccgggttttctcggattgacggtaggtggag  |     |
| М. | bovis          | tgtaaacctctttcaccatcgacgaaggtccgggttctctctggattgacggtaggtggag |     |
| М. | chelonae       | tgtaaacctctttcagtagggacgaagcgaaagtgacggtacctacagaagaaggaccgg  |     |
| М. | farcinogen     | tgtaaacctctttcaatagggacgaagcgcaagtgacggtacctatagaagaaggaccgg  |     |
| М. | fortuitum      | tgtaaacctctttcaatagggacgaagcgcaagtgacggtacctatagaagaaggaccgg  |     |
| М. | gordonae       | tgtaaacctctttcaccatcgacgaaggtccgggttttctcgggctgacggtaggtggag  |     |
| М. | heckeshornense | tgtaaacctctttcaccatcgacgaagccgcagcttttgttgtggtgacggtaggtggag  |     |
| М. | intercellulare | tgtaaacctctttcaccatcgacgaaggtccgggttttctcggattgacggtaggtggag  |     |
| М. | kansaii        | tgtaaacctctttcaccatcgacgaaggtccgggttctctctc                   |     |
| М. | kubicae        | tgtaaacctctttcagcagggacgaagcgcaagtgacggtacctgcagaagaagcaccgg  |     |
| М. | lentoflavum    | tgtaaacctctttcagcagggacgaagcgcaagtgacggtacctgcagaagaagcaccgg  |     |
| М. | mucogenicum    | tgtaaacctctttcaatagggacgaagcgcaagtgacggtacctatagaagaagcaccgg  |     |
| М. | parafinum      | tgtaaacctctttcaccatcgacgaaggctcacttcgtgagttgacggtaggtggagaag  |     |
| М. | simiae         | tgtaaacctctttcagcaggacgaagcgcaagtgacggtacctgcagaagaagcaccgg   |     |
| М. | szulgai        | tgtaaacctctttcaccatcgacgaaggtccgggttttctcggattgacggtaggtggag  |     |
| М. | tuberculosis   | tgtaaacctctttcaccatcgacgaaggtccgggttctctctc                   |     |

| М. | abscessus      | ccaactacgtgccagcagccgcggtaatacgtagggtccgagcgttgt             | 531 |
|----|----------------|--|-----|
| М. | avium          | aagcaccggccaactacgtgccagcagccgcggtaatacgtagggtgcgagcgttgt    |     |
| М. | bovis          | aagaagcaccggccaactacgtgccagcagccgcggtaatacgtagggtgcgagcgttgt |     |
| М. | chelonae       | ccaactacgtgccagcagccgcggtaatacgtagggtccgagcgttgt             |     |
| М. | farcinogen     | ccaactacgtgccagcagccgcggtaatacgtagggtccgagcgttgt             |     |
| М. | fortuitum      | ccaactacgtgccagcagccgcggtaatacgtagggtccgagcgttgt             |     |
| М. | gordonae       | aagaagcaccggccaactacgtgccagcagccgcgntaatacgtagggtgcgagcgttgt |     |
| М. | heckeshornense | aagaagcaccggccaactacgtgccagcagccgcggtaatacgtagggtgcaagcgttgt |     |
| М. | intercellulare | aagaagcaccggccaactacgtgccagcagccgcggtaatacgtagggtgcgagcgttgt |     |
| М. | kansaii        | aagaagcaccggccaactacgtgccagcagccgcgntaatacgtagggtgcgagcgttgt |     |
| М. | kubicae        | ccaactacgtgccagcagccgcggtaatacgtagggtgcgagcgttgt             |     |
| М. | lentoflavum    | ccaactacgtgccagcagccgcggtaatacgtagggtgcgagcgttgt             |     |
| М. | mucogenicum    | ccaactacgtgccagcagccgcggtaatacgtagggtgcgagcgttgt             |     |
| М. | parafinum      | aagcaccggccaactacgtgccagcagccgcggtaatacgtagggtgcgagcgttgt    |     |
| М. | simiae         | ccaactacgtgccagcagccgcggtaatacgtagggtgcgagcgttgt             |     |
| М. | szulgai        | aagaagcaccggccaactacgtgccagcagccgcggtaatacgtagggtgcgagcgttgt |     |
| М. | tuberculosis   | aagaagcaccggccaactacgtgccagcagccgcggtaatacgtagggtgcgagcgttgt |     |

| abscessus      | ccggaattactgggcgtaaagagctcgtaggtggtttgtcgcgttgttcgtgaaaactca          | 591  |
|----------------|---|--|
| avium          | <br>  ccggaattactgggcgtaaagagctcgtaggtggtttgtcgcgttgttcgtgaaatctca    |  |
| bovis          | ccggaattactgggcgtaaagagctcgtaggtggtttgtcgcgttgttcgtgaaatctca          |  |
| chelonae       | ccggaattactgggcgtaaagagctcgtaggtggtttgtcgcgttgttcgtgaaaactca          |  |
| farcinogen     | ccggaattactgggcgtaaagagctcgtaggtggtttgtcgcgttgttcgtgaaaactca          |  |
| fortuitum      | ccggaattactgggcgtaaagagctcgtaggtggtttgtcgcgttgttcgtgaaaactca          |  |
| gordonae       | ccggaattactgggcgtaaagagctcgtaggtggtttgtcgcgttgttcgtgaaatctca          |  |
| heckeshornense |   |  |
| intercellulare |   |  |
| kansaii        | ccggaattactgggcgtaaagagctcgtaggtggtttgtcgcgttgttcgtgaaatctca          |  |
| kubicae        | ccggaattactgggcgtaaagagctcgtaggtggtttgtcgcgttgttcgtgaaaaccgg          |  |
| lentoflavum    | ccggaattactgggcgtaaagagctcgtaggtggtttgtcgcgttgttcgtgaaaaccgg          |  |
| mucogenicum    | ccggaattactgggcgtaaagagctcgtaggtggtttgtcgcgttgttcgtgaaaactca          |  |
| parafinum      |   |  |
|                | 1 111   |  |
|                | 1 111   |  |
| -              | ccggaattactgggcgtaaagagctcgtaggtggtttgtcgcgttgttcgtgaaatctca          |  |
|                | fortuitum  gordonae  heckeshornense  intercellulare  kansaii  kubicae | avium ccggaattactgggcgtaaagagctcgtaggtggtttgtcgcgttgttcgtgaaatctca bovis ccggaattactgggcgtaaagagctcgtaggtggtttgtcgcgttgttcgtgaaatctca chelonae ccggaattactgggcgtaaagagctcgtaggtggtttgtcgcgttgttcgtgaaaactca farcinogen ccggaattactgggcgtaaagagctcgtaggtggtttgtcgcgttgttcgtgaaaactca fortuitum ccggaattactgggcgtaaagagctcgtaggtggtttgtcgcgttgttcgtgaaaactca gordonae ccggaattactgggcgtaaagagctcgtaggtggtttgtcgcgttgttcgtgaaaactca heckeshornense ccggaattactgggcgtaaagagctcgtaggtggtttgtcgcgttgttcgtgaaatctca kansaii ccggaattactgggcgtaaagagctcgtaggtggtttgtcgcgttgttcgtgaaatctca kansaii ccggaattactgggcgtaaagagctcgtaggtggtttgtcgcgttgttcgtgaaatctca kubicae ccggaattactgggcgtaaagagctcgtaggtggtttgtcgcgttgttcgtgaaaaccgg lentoflavum ccggaattactgggcgtaaagagctcgtaggtggtttgtcgcgttgttcgtgaaaaccgg mucogenicum ccggaattactgggcgtaaagagctcgtaggtggtttgtcgcgttgttcgtgaaaaccca parafinum ccggaattactgggcgtaaagagctcgtaggtggtttgtcgcgttgttcgtgaaaaccca i iii simiae cnggaattactgggcgtaaagagctcgtaggtggtttgtcgcgttgttcgtgaaaacccgg szulgai ccggaattactgggcgtaaagagctcgtaggtggtttgtcgcgttgttcgtgaaaacccg |

|       | -1             |   | 651 |
|-------|----------------|---|-----|
| м.    | abscessus      | tgcgggcgatacgggcagactagagtactgcaggggagactggaattcctggtgtagcgg  | 631 |
| М.    | avium          | ttaactgtgagcgtgcgggcgatacgggcagactagagtactgcaggggagactggaatt  |     |
| М.    | bovis          | gcttaactgtgagcgtgcgggcgatacgggcagactagagtactgcaggggagactggaa  |     |
|       |                |   |     |
| Μ.    | chelonae       | tgcgggcgatacgggcagactagagtactgcaggggagactggaattcctggtgtagcgg  |     |
|       |                |   |     |
| М.    | farcinogen     | gcqqqcqatacqqqcaqactaqaqtactqcaqqqqaqactqqaattcctggtgtagcggt  |     |
|       | j              |   |     |
| М.    | fortuitum      | cgggcgatacgggcagactagagtactgcaggggagactggaattcctggtgtagcggtg  |     |
|       |                |   |     |
| Μ.    | gordonae       | aactgtgagcgtgcggncgatacgggcagacttgagtactgcaggggagactggaattcc  |     |
|       | <b>9</b>       |   |     |
| Μ.    | heckeshornense | cacagettaactgtgggegtgegggegatacgggeaggetggagtgetgeaggggagaet  |     |
|       |                |   |     |
| Μ.    | intercellulare | taactgtgagcgtgcgggcgatacgggcagactagagtactgcaggggagactggaattc  |     |
|       |                |   |     |
| М.    | kansaii        | ttaactgtgagcgtgcgngcgatacgggcagactagagtactgcaggggagactggaatt  |     |
|       |                |   |     |
| Μ.    | kubicae        | gtgcggcgatacgggcagactggagtactgcaggggagactggaattcctggtgtagcg   |     |
|       |                | g-g-ggg-gm-m-ggg-mgmggmg-r                                    |     |
| М.    | lentoflavum    | gtgcgggcgatacgggcagactggagtactgcaggggagactggaattcctggtgtagcg  |     |
| •••   |                | 1   |     |
| М.    | mucogenicum    | gcqqqcqatacqqqcaqactaqaqtactqcaqqqqaactqqaattcctqqtqtaqcqqt   |     |
|       |                |   |     |
| м     | parafinum      | actgtgagcgtgcgggcgatacgggcagactagagtactgcaggggagactggaattcct  |     |
| 11.   | pararriam      |   |     |
| м     | simiae         | gtqcqqqcqatacqqqcaqactqqaqtactqcaggqgagactggaattcctggtgtagcg  |     |
| 1.1.  | SIMIAC         |   |     |
| M     | amulani        | taactgtgagcgtgcggncgatacgggcagactggagtactgcaggggagactggaattc  |     |
| 1,1 • | szulgai        |   |     |
| 14    | h              |   |     |
| M.    | tuberculosis   | gcttaactgtgagcgtgcgggcgatacgggcagactagagtactgcagggggagactggaa |     |

| M. abscessus      | aattcctggtgtagcggtg <u>gaatgcgcagatatcaggagga</u> acaccggtggcgaaggcgg           |
|-------------------|---|
| M. avium          | aattcctggtgtagcggtggaatgcgcagatatcaggaggaacaccggtggcgaaggcgg                    |
| M. bovis          | aattcctggtgtagcggtggaatgcgcagatatcaggaggaacaccggtgncgaaggcgg                    |
| M. chelonae       | aattcctggtgtagcggtggaatgcgcagatatcaggaggaacaccggtggcgaaggcgg                    |
| M. farcinogen     | aattcctggtgtagcggtggaatgcgcagatatcaggaggaacaccggtggcgaaggcgg                    |
| M. fortuitum      | $\verb"aattcctggtgtagcggtggaatgcgcagatatcaggaggaacaccggtggcgaaggcgg$            |
| M. gordonae       | aattcctggtgtagcggtggaatgcgcagatatcaggaggaacaccggtggcgaaggcgg                    |
| M. heckeshornense | $\verb  aattcctggtgtagcggtggaatgcgcagatatcaggagga  \verb  acaccggtggcgaaggcgg $ |
| M. intercellulare | aattcctggtgtagcggtggaatgcgcagatatcaggaggaacaccggtggcgaaggcgg                    |
| M. kansaii        | aattcctggtgtagcggtggaatgcgcagatatcaggaggaacaccggtggcgaaggcgg                    |
| M. kubicae        | $\tt aattcctggtgtagcggtg\underline{gaatgcgcagatatcaggagga} acaccggtggcgaaggcgg$ |
| M. lentoflavum    | aattcctggtgtagcggtggaatgcgcagatatcaggaggaacaccggt                               |
| M. mucogenicum    | aattcctggtgtagcggtggaatgcgcagatatcaggaggaacaccggtggcgaaggcgg                    |
| M. parafinum      | aattcctggtgtagcggtggaatgcgcagatatcaggaggaacaccggtggcgaaggcgg                    |
| M. simiae         | aattcctggtgtagcggtggaatgcgcagatatcaggaggaacaccggtggcgaaggcgg                    |
| M. szulgai        | aattcctggtgtagcngtggaatgcgcagatatcaggaggaacaccggtggcgaaggcgg                    |
| M. tuberculosis   | aattcctggtgtagcggtggaatgcgcagatatcaggaggaacaccggtggcgaaggcgg                    |
|                   |   |

Figure 3 A

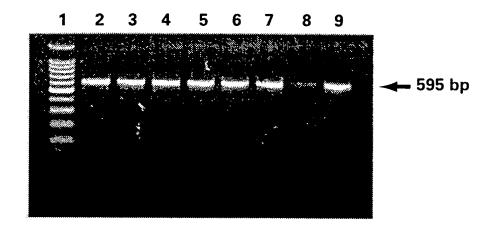


Figure 3 B

